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20. NEW RECORDS OF PRAWNS FROM LAKE PULICAT WITH NOTES ON THEIR DISTRIBUTION

Lake Pulicat is a marine fauna dominated brackish water system on the east coast of India. It is one of the chief sources of fish supply to Madras City (Moses 1923). A preliminary survey of the flora, fauna and fisheries of the Lake Pulicat was made by Chacko *et al.* during the years 1951-52. This note deals with additional records of prawns from Lake Pulicat.

Altogether 23 species were recorded during the years 1966-68 are listed.

Family PENAEIDAE

1. *Penaeus indicus* M. Edw.
2. *P. monodon* Fabricius
3. *P. semisulcatus* de Haan
4. *P. japonicus* Bate
5. *P. merguensis* de Man
6. *Metapenaeus monoceros* (Fabricius)
7. *M. dobsoni* (Miers)
8. *M. brevicornis* (M. Edw.)
9. *M. affinis* (M. Edw.)
10. *M. burkenroadi* Kubo
11. *Metapenaeopsis stridulans* (Alcock)
12. *Parapenaeopsis nana* (Alcock)
13. *P. cornuta maxillipedo* Alcock

Family SERGESTIDAE

14. *Acetes erythraeus* Nobili

Family PALAEMONIDAE

15. *Macrobrachium rude* (Heller)
16. *M. scabriculum* (Heller)
17. *M. malcolmsoni* (M. Edw.)
18. *M. lamarrei* (M. Edw.)
19. *Periclimenes indicus* Kemp

Family ALPHEIDAE

20. *Alpheus malabaricus* Fabricius
21. *A. paludicola* Kemp
22. *Ogyrides striaticauda* Kemp

Family CRANGONIDAE

23. *Pontophilus hendersoni* Kemp

Seven (1 to 3, 6, 7, 14, 21) of the 23 prawns and shrimps listed above have been recorded by previous workers (Chacko *et al.* op. cit.). The majority of the forms are marine in origin. The freshwater component of the fauna is very poor (15 to 18). The dominance of marine forms is presumably the result of its proximity to the Bay of Bengal, absence of large rivers draining into the Lake, dry weather conditions prevailing for about 8-9 months in a year and low rainfall.

It is of interest to note that the prawn, *Parapenaeopsis cornuta maxillipedo* entered the lake only during the period April to August. *Metapenaeus burkenroadi* is a new record for Cochin backwater (M. J. George 1964) but in the Lake Pulicat it occurs throughout the year forming a minor commercial fishery.

Several immature specimens of *Penaeus semisulcatus* showed both developing petasma and thelycum, a character in hermaphrodites, as observed in Lake Chilka (Subrahmanyam 1966). Two specimens measuring 117 mm and 88 mm showed fully developed petasmas (not yet fused) and thelycum. The cause of the prevalence of hermaphroditic individuals only in *P. semisulcatus* is not clearly understood.

The bulk of the commercial prawn catch is composed of seven species: *Penaeus monodon*, *P. indicus*, *P. semisulcatus*, *Metapenaeus monoceros*, *M. dobsoni*, *M. affinis* and *M. burkenroadi*, of which *Penaeus indicus* is the predominant species, contributing on the average 300 tonnes (60% of the total prawn catch). Detailed investigations on the biology of these forms have been made and will be published elsewhere.

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